

mile up the stream. Associated with the cherries is the European Spindle Tree, very extensively naturalized along this stream for some distance.

The collection near Ivy Mills was made by Dr. F. W. Pennell in 1909. Dr. Pennell informs me that a single tree was noted, apparently wild, along the bank of the West Branch of Chester Creek. This locality is a short distance above Chester Heights, a more familiar place-name.

The Mount Cuba record is based upon material collected by Mr. MacElwee, May 6, 1893. Unfortunately the station has not been rediscovered and we have no detailed information on the occurrence.

It may be noted, in summary, that these observations on the naturalized condition exhibited by *Prunus Padus* in the Philadelphia region are based upon what may be considered a good score of stations, embracing not less than a hundred trees, scattered over a distance of more than fifty miles. Furthermore, that collections and field observations extend through a period of thirty years.

ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA.

THE AMERICAN VARIETY OF SCHEUCHZERIA PALUSTRIS.

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UPON comparing the American material of *Scheuchzeria palustris* with the typical European plants it at once becomes apparent that in the size and shape of the fruit there is a pronounced difference between the two. The European plant has the short ovoid follicles only 5–7 mm. long and crowned by the strongly decurrent sessile stigma; but in the American plant the often narrower follicles are 7–10 mm. long and tipped by a definite thick style, forming a slightly curved beak 0.5–1 mm. long. The seeds of the European plant are likewise smaller, 3–4 mm. long, while in the American they are 4–5 mm. in length and black in maturity. Whether the seeds of the European become black I have been unable to make out, neither Micheli¹ nor Buchenau² stating the color, although Syme says, "pale olive."³ Such seeds of the European plant as have been avail-

¹ Micheli in DC. Mon. iii. 96 (1881).

² Buchenau in Engler, Pflanzenr. iv. Ab. 14: 15 (1903).

³ Engl. Bot. ed. Syme, ix. 67 (1873).

able are a pale brown but this is the color of immature seeds of the American. It is, therefore, not wise to lay great emphasis upon the color. Nor do there seem to be any appreciable differences in the rootstocks, foliage and flowers of the two plants; and it is significant that, although having the sessile stigmas of the European, the Japanese plant has follicles as large as in the American. It seems, then, that the North American plant should be called

SCHEUCHZERIA PALUSTRIS L., var. **americana**, n. var., a forma europaea differt floribus 3-4 mm. longis; folliculis 7-10 mm. longis rostratis, rostro 0.5-1 mm. longo curvato; seminibus anguste ellipsoideis 4-5 mm. longis atris.—Newfoundland to Manitoba and Washington, south to New Jersey, Pennsylvania, Illinois, Iowa and California. The following, selected from many specimens, are characteristic. NEWFOUNDLAND: wet open bog, Glenwood, July 12 and 13, 1911, *Fernald, Wiegand & Darlington*, no. 4707; shallow pools in bogs, Grand Falls, July 26, 1911, *Fernald, Wiegand, Bartram & Darlington*, no. 4510. QUEBEC: sphagnum bog, Natashquan, September 4, 1915, *St. John*, no. 90,107; quagmires at 1035 m. (3400 ft.) Table-top Mountain, August 10, 1906, *Fernald & Collins*, no. 332; Napierville, July 10, 1863, *G. G. Kennedy*. NOVA SCOTIA: bog-holes in barrens, mountains west of Ingonish, August 13, 1914, *Nichols*, no. 842; quagmire-margin of Gold Lake, Birchtown Brook, September 8, 1921, *Fernald & Long*, no. 23,164 (TYPE in Gray Herb.); sphagnous wet peaty margin of Harper Lake, September 8, 1921, *Fernald & Long*, no. 23,165. MAINE: Bangor bog, Orono, July 27, 1895, *Fernald*, no. 352; open sphagnum bog, Baker bog, Township vi, Range 17, Somerset Co., July 17, 1917, *St. John & Nichols*, no. 2110; bog, South Chesterville, August, 1904, *L. O. Eaton*; boggy intervale, St. Croix Junction, Calais, August 3, 1909, *Fernald*, no. 1600; Great Heath, Great Cranberry Island, August 29, 1892, *Redfield & Rand*; bog, edge of Great Pond, Belgrade, August 31, 1898, *Fernald*, no. 2742; quaking bog by Lily Pond, Limington, August 29, 1916, *Fernald, Long & Norton*, no. 12,419. NEW HAMPSHIRE: bog, Shelburne, August 16, 1884, *Deane*; abundant about Buck Pond, Stewartstown, July 19, 1917, *Fernald & Pease*, no. 16,606; bog north of Cherry Pond, Jefferson, September 12, 1908, *Pease*, no. 11,433; Large Pond, Fall Mt., Walpole, July 12, 1901, *Blanchard*. VERMONT: "In udis sphagnosis ad Colchester," *Oakes*; Snake Mt., August 25, 1880, *Faxon*; Mud Pond, alt. 2300 ft., Wallingford, July 7, 1898, *Eggleston & Kent*; bog, Pownal, July 29, 1898, *Churchill*. MASSACHUSETTS: Tewksbury, June 23, 1853, *Wm. Boott*; swamp, Natick, June 30, 1885, *Deane*; peat bog, Billings Pond, Sharon, June 27, 1909, *Knowlton*; peat bog, Sheffield, August 27, 1902, *Hoffmann*. CONNECTICUT: sphagnum bog by Lake Congamond, Suffield, June 22, 1915, *Blewitt*, no. 3539; sphagnum bog about Bingham Pond, Salisbury, July 30,

1904, *Bissell*. NEW YORK: bog west of Ampersand Lake, July 13, 1899, *Rowlee, Wiegand & Hastings*; Albany, *Torrey*; quaking morass on Hidden Lake, Litchfield, June 27, 1901, *Haberer*, no. 1006; sphagnum bog, Duck Lake, Conquest, July 1, 1916, *McDaniels, Metcalf & Wiegand*, no. 5477; open moor of Junius Peat Bog, Waterloo, June 20, 1914, *Thomas & Wiegand*, no. 1520. NEW JERSEY: bogs, Budd's Lake, Morris Co., June 25, 1869, *C. F. Parker*. PENNSYLVANIA: Grass Lake, Pocono Mt., August 19, 1863, *Traill Green*; kettle hole bog, Pocono Plateau, July 15, 1904, *Harshberger*. ONTARIO: bogs, Mere Bleue, June 15, 1898, *Macoun*, no. 67,792. MICHIGAN: sphagnum bog, Mud Lake, Cheboygan Co., July 28, 1917, *Ehlers*, no. 568. WISCONSIN: peat bogs, Marinette Co., July 6, 1891, *Schuette*. ILLINOIS: Ringwood, 1860, *Vasey*. MINNESOTA: White Bear Lake, July 17, 1888, *Schuette*. IOWA: Armstrong, August 8, 1884, *Cratty*. MANITOBA: between Cumberland House (Sask.) and Hudson Bay, *Richardson*. CALIFORNIA: Sierra Co., 1875, *Lemmon*, no. 1037. WASHINGTON: swamps at 610–915 m. (2–3000 ft.) alt., Skamania Co., Sept. 2, 1893, *Suksdorf*, no. 1327; White Salmon, 1878, *Suksdorf*; Colville to the Rocky Mts., 1861, *Lyall*.

There are many excellent illustrations of typical *Scheuchzeria palustris* of Europe, for instance, *Flora Danica*, i. t. 76 (1766); *Nees, Gen. Pl. Germ.* ii. t. 24 (1843); *Reichenb. Ic. Fl. Germ.* x. t. 419 (1848); *Engl. Bot. ed. Syme*, ix. t. 1435 (1873); *Thomé, Fl. von Deutschl.* i. t. 34A (1886).

GRAY HERBARIUM.

NOTES ON TREES AND SHRUBS OF THE SOUTH-EASTERN UNITED STATES.

W. W. ASHE.

? × ***Quercus caput-rivuli***, sp. nov. A tree 6–12 m. high, 1–3 dm. in diameter with somewhat pendulous lower branches. Bark on trunk at the base of larger trees nearly black, deeply furrowed and cross-checked, above gray and nearly smooth. Twigs slender, pubescent with short brown stellate hairs, partly persistent until the second year. Leaves prevailing broadly obovate, undulate or rarely slightly 3-lobed at the broad apex, cuneate or abruptly narrowed or sometimes even rounded at the base, blades 7–14 cm. long, 5–10 cm. wide, firm, dark green and glabrate above, at first more or less stellate-pubescent beneath, at length glabrate except for tufts in the axils of the 3–5 pairs of prominent lateral veins, which (and usually the midrib as well) divide up near the margins of the blades and consequently are seldom extended as awns; petioles 6–8 mm.